WHAT IS CLAIMED IS:

1. A semiconductor device comprising semiconductor elements obtained by cutting a semiconductor wafer having an integrated circuit and an electrode pad formed on one side along a cutting scribe line, a stress cushioning layer installed on said semiconductor elements, a lead wire portion extending from said electrode pad to a top of said stress cushioning layer through an opening formed in said stress cushioning layer on said electrode pad, external electrodes arranged on said lead wire portion on said top of said stress cushioning layer, and a conductor protective layer installed on said stress cushioning layer excluding said external electrode arranged portion and on a conductor portion, wherein said stress cushioning layer, said lead wire portion, said conductor protective layer, and said external electrodes have means for forming each end face on an end surface of said semiconductor elements inside said cutting scribe line and exposing a range from said end face on said end surface of said semiconductor elements to an inside of said scribe line.

2. A semiconductor device according to Claim 1, wherein said end face of said conductor protective

player is formed inside said end face of said stress cushioning layer.

3. A semiconductor device according to Claim 1, wherein said end face of said conductor protective player is formed outside said end face of said stress cushioning layer.

4. A semiconductor device according to any of Claims 1 to 3, wherein an end area of said stress cushioning layer is formed so as to become taperingly thinner toward the said end face.

5. A semiconductor device comprising semiconductor elements obtained by cutting a semiconductor wafer having an integrated circuit and an electrode pad formed on one side along a cutting scribe line, a semiconductor element protective layer installed on said semiconductor elements, a stress cushioning layer installed on said semiconductor element protective layer, a first opening formed in said semiconductor element protective layer on said electrode pad, a second opening formed in said stress cushioning layer on said electrode pad, a lead wire portion extending to a top of said stress cushioning layer through said

first opening and said second opening respectively from said electrode pad, external electrodes arranged on said lead wire portion on said top of said stress cushioning layer, and a conductor protective layer installed on said stress cushioning layer excluding said external electrode arranged portion and on said conductor portion, wherein said semiconductor element protective layer, said stress cushioning layer, said lead wire portion, said conductor protective layer, and said external electrodes have means for forming each end face on an end surface of said semiconductor elements inside a cutting scribe line and exposing a range from said end face on said end surface of said semiconductor elements to an inside of said scribe line.

6. A semiconductor device according to Claim 5, wherein said end face of said conductor protective player is formed inside said end face of said stress cushioning layer.

7. A semiconductor device according to Claim 5, wherein said end face of said conductor protective player is formed outside said end face of said stress cushioning layer.

8. A semiconductor device according to Claim 6 or 7, wherein said end face of said semiconductor element protective player is formed outside said end face of said stress cushioning layer.

9. A semiconductor device according to Claim 6 or 7, wherein said end face of said semiconductor element protective player is formed inside said end face of said stress cushioning layer.

10. A semiconductor device according to any of Claims 4 to 9, wherein an end area of said stress cushioning layer is formed so as to become taperingly thinner toward the said end face.

11. A semiconductor device manufacturing method comprising a first step of forming a plurality of semiconductor elements having an integrated circuit and an electrode pad on a circuit forming surface of a semiconductor wafer, a second step of forming a stress cushioning layer on a plurality of semiconductor elements, a third step of forming an opening in an electrode pad of said stress cushioning layer and forming a notch wider than a width of a scribe line in

said stress cushioning layer on said cutting scribe line of said semiconductor wafer, a fourth step of forming a lead wire portion extending from said electrode pad to said stress cushioning layer via said opening, a fifth step of forming a conductor protective layer which covers said stress cushioning layer and said lead wire portion and has an external electrode connection window portion on said lead wire portion and a notch at a position corresponding to a notch of said stress cushioning layer, a sixth step of forming an external electrode in said external electrode connection window portion, and a seventh step of cutting said semiconductor wafer along said cutting scribe line and obtaining a plurality of semiconductor devicees in minimum units.

12. A semiconductor device manufacturing method according to Claim 11, wherein an end face obtained by said notch of said conductor protective layer at said Step 5 is formed inside said semiconductor wafer cutting scribe line.

13. A semiconductor device manufacturing method according to Claim 12, wherein said end face obtained by said notch of said conductor protective layer at

said Step 5 is formed inside an end face formed by said notch of said stress cushioning layer.

14. A semiconductor device manufacturing method according to Claim 12, wherein said end face obtained by said notch of said conductor protective layer at said Step 5 is formed outside an end face formed by said notch of said stress cushioning layer.

15. A semiconductor device manufacturing method comprising a first step of forming a plurality of semiconductor elements having an integrated circuit and an electrode pad on a circuit forming surface of a semiconductor wafer, a second step of forming a semiconductor element protective layer on a plurality of semiconductor elements, a third step of forming a first opening in an electrode pad of said semiconductor element protective layer and forming a notch wider than a width of a scribe line in said semiconductor element protective layer on said cutting scribe line of said semiconductor wafer, a fourth step of forming a stress cushioning layer on said semiconductor element protective layer, a fifth step of forming a second opening in said electrode pad of said stress cushioning layer and forming a notch at a

position corresponding to a notch of said semiconductor element protective layer in said stress cushioning layer on said cutting scribe line of said semiconductor wafer, a sixth step of forming a lead wire portion extending from said electrode pad to said stress cushioning layer via said first opening and said second opening, a seventh step of forming a conductor protective layer which covers said stress cushioning layer and said lead wire portion and has an external electrode connection window portion on said lead wire portion and a notch at a position corresponding to said notch of said stress cushioning layer, an eighth step of forming an external electrode in said external electrode connection window portion, and a ninth step of cutting said semiconductor wafer along said cutting scribe line and obtaining a plurality of semiconductor devicees in minimum units.

16. A semiconductor device manufacturing method according to Claim 15, wherein an end face obtained by said notch of said stress cushioning layer at said Step 4 is formed inside said semiconductor wafer cutting scribe line.

17. A semiconductor device manufacturing method

according to Claim 16, wherein said end face obtained by said notch of said stress cushioning layer at said Step 4 is formed inside an end face formed by said notch of said semiconductor element protective layer.

18. A semiconductor device manufacturing method according to Claim 16, wherein said end face obtained by said notch of said stress cushioning layer at said Step 4 is formed outside an end face formed by said notch of said semiconductor element protective layer.

19. A semiconductor device manufacturing method according to Claim 16, wherein said end face obtained by said notch of said stress cushioning layer at said Step 4 is formed so as to be installed on the same plane as that of an end face formed by said notch of said semiconductor element protective layer.

20. A semiconductor device manufacturing method according to Claim 15, wherein an end face obtained by said notch of said conductor protective layer at said Step 7 is formed inside said semiconductor wafer cutting scribe line.

21. A semiconductor device manufacturing method

according to Claim 20, wherein said end face obtained by said notch of said conductor protective layer at said Step 7 is formed inside an end face formed by said notch of said semiconductor element protective layer.

22. A semiconductor device manufacturing method according to Claim 20, wherein said end face obtained by said notch of said conductor protective layer at said Step 7 is formed outside an end face formed by said notch of said semiconductor element protective layer.

23. A semiconductor device manufacturing method according to Claim 20, wherein said end face obtained by said notch of said conductor protective layer at said Step 7 is formed so as to be installed on the same plane as that of an end face formed by said notch of said semiconductor element protective layer.

24. A semiconductor device manufacturing method according to Claim 16 or 20, wherein said end face obtained by said notch of said conductor protective layer at said Step 7 is formed inside an end face formed by said notch of said semiconductor element

protective layer and an end face formed by said notch of said stress cushioning layer.

25. A semiconductor device manufacturing method according to Claim 16 or 20, wherein said end face obtained by said notch of said conductor protective layer at said Step 7 is formed outside an end face formed by said notch of said semiconductor element protective layer and an end face formed by said notch of said stress cushioning layer.

26. A semiconductor device manufacturing method according to Claim 16 or 20, wherein said end face obtained by said notch of said conductor protective layer at said Step 7 is formed between an end face formed by said notch of said semiconductor element protective layer and an end face formed by said notch of said stress cushioning layer.

27. A semiconductor device manufacturing method according to Claim 16 or 20, wherein said end face obtained by said notch of said conductor protective layer at said Step 7 is formed to be installed on the same plane as that of an end face formed by said notch of said semiconductor element protective layer and an

end face formed by said notch of said stress cushioning layer.